

112.4 - Trace Elements (wafer form)

These SRMs are for calibrating instruments and evaluating analytical techniques used to determine trace elements in inorganic matrices. NOTE: The nominal glass composition of SRMs 610 through 617 is 72% SiO₂, 12% CaO, 14% Na₂O, and 2% Al₂O₃.

Technical Contact: william.c.davis@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

		Element (in mg/kg) Wafer Thickness (in mm) 3 and 1															
SRM	Description	Unit of Issue	Antimony	Barium	Boron	Cadmium	Cerium	Cobalt	Copper	Dysprosium	Erbium	Europium	Gadolinium	Gallium	Gold	Iron	Lanthanum
610	Trace Elements in Glass	6 wafers			(351)			(390)	(444)						(25)	458	
611	Trace Elements in Glass	6 wafers			(351)			(390)	(444)						(25)	458	
612	Trace Elements in Glass	6 wafers		(41)	(32)		(39)	(35.5)	(37.7)	(35)	(39)	(36)	(39)		(5)	51	(36)
613	Trace Elements in Glass	6 wafers		(41)	(32)		(39)	(35.5)	(37.7)	(35)	(39)	(36)	(39)		(5)	51	(36)
614	Trace Elements in Glass	6 wafers	(1.06)		(1.30)	(0.55)		(0.73)	1.37			(0.99)		(1.3)	(0.5)	(13.3)	(0.83)
615	Trace Elements in Glass	6 wafers	(1.06)		(1.30)	(0.55)		(0.73)	1.37			(0.99)		(1.3)	(0.5)	(13.3)	(0.83)
616	Trace Elements in Glass	6 wafers	(0.078)		(0.20)				(0.80)					(0.23)	(0.18)	(11)	(0.034)
617	Trace Elements in Glass	6 wafers	(0.078)		(0.20)				(0.80)					(0.23)	(0.18)	(11)	(0.034)

Values in parentheses are not certified and are given for information only.

In addition to the elements listed above, the glass SRMs contain the following 25 elements: As, Be, Bi, Cs, Cl, F, Ge, Hf, Hg, Li, Lu, Mg, Nb, P, Pr, Se, S, Te, Tb, Tm, Sn, W, V, Y, and Zr.

112.4 - Trace Elements (wafer form)

These SRMs are for calibrating instruments and evaluating analytical techniques used to determine trace elements in inorganic matrices. NOTE: The nominal glass composition of SRMs 610 through 617 is 72% SiO₂, 12% CaO, 14% Na₂O, and 2% Al₂O₃.

Technical Contact: william.c.davis@nist.gov

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

Element (in mg/kg) Wafer Thickness (in mm) 3 and 1																	
SRM	Description	Unit of Issue	Lead	Manganese	Neodymium	Nickel	Potassium	Rubidium	Samarium	Scandium	Silver	Strontium	Thallium	Thorium	Titanium	Uranium	Ytterbium
610	Trace Elements in Glass	6 wafers	426	485		458.7	(461)	425.7			(254)	515.5	(61.8)	457.2	(437)	461.5	
611	Trace Elements in Glass	6 wafers	426	485		458.7	(461)	425.7			(254)	515.5	(61.8)	457.2	(437)	461.5	
612	Trace Elements in Glass	6 wafers	38.57	(39.6)	(36)	38.8	(64)	31.4	(39)		22.0	78.4	(15.7)	37.79	(50.1)	37.38	(42)
613	Trace Elements in Glass	6 wafers	38.57	(39.6)	(36)	38.8	(64)	31.4	(39)		22.0	78.4	(15.7)	37.79	(50.1)	37.38	(42)
614	Trace Elements in Glass	6 wafers	2.32			(0.95)	30	0.855		(0.59)	0.42	45.8	(0.269)	0.748	(3.1)	0.823	
615	Trace Elements in Glass	6 wafers	2.32			(0.95)	30	0.855		(0.59)	0.42	45.8	(0.269)	0.748	(3.1)	0.823	
616	Trace Elements in Glass	6 wafers	1.85				29	(0.100)		(0.026)		41.72	(0.0082)	0.0252	(2.5)	0.0721	
617	Trace Elements in Glass	6 wafers	1.85				29	(0.100)		(0.026)		41.72	(0.0082)	0.0252	(2.5)	0.0721	

Values in parentheses are not certified and are given for information only.

In addition to the elements listed above, the glass SRMs contain the following 25 elements: As, Be, Bi, Cs, Cl, F, Ge, Hf, Hg, Li, Lu, Mg, Nb, P, Pr, Se, S, Te, Tb, Tm, Sn, W, V, Y, and Zr.